Page 1, second paragraph, RELATED APPLICATION:

This application claims priority from United States provisional application S/N 60/181,488, filed on February 10, 2000, the disclosure of which is herein incorporated by reference. This application is also a continuation-in-part of U.S. Patent Application Serial No. 09/320,784, filed May 27, 1999, now U.S. Patent No. 6,187,226, which is a continuation-in-part of U.S. Patent Application Serial No. 09/076,922, now U.S. Patent No. 5,935,293, filed May 12, 1998, which is a continuation-in-part of U.S. Patent Application Serial No. 08/404,395, U.S. Patent No. 5,749,937, filed March 14, 1995, which has since been reissued on September 24, 2002, as U.S. RE37,853 E the disclosures of which are incorporated herein by reference.

Please cancel claims 20 through 32 and 62 through 87.

Please amend the claims as Follows:

1. A method of converting one or more reactants to a desired end product, comprising:

introducing a reactant stream at one end of an axial reactor;

heating the reactant stream as the reactant stream flows axially through an injection line having a reduced diameter with respect to the axial reactor to produce turbulent flow and thereby thoroughly mix the reactant stream with a heating gas; and

passing the thoroughly mixed reactant stream axially through a reaction zone of the axial reactor, the reaction zone maintained at a substantially uniform temperature over the length of the reaction zone, wherein the axial reactor has a length and a temperature and is operated under conditions sufficient to effect heating of the reactant stream to a selected reaction temperature at which a desired product stream is produced at a location adjacent the outlet end of the axial reactor.

2. The method of claim 1, wherein the reactant stream comprises methane and the desired end product comprises acetylene.